

BULIMIA NERVOSA – A REVIEW

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Abstract

Introduction: The term bulimia nervosa describes a food intake disorder which is characterized by episodic binge eating (eating very large amounts of food in a short period of time), followed by the effort of purging all the unnecessary calories usually through vomiting, laxatives, diuretics and excessive exercise. **Purpose:** The purpose of this review is to present all aspects related to bulimia nervosa and its treatment.

Methodology: The material of the study has been recent articles concerning the subject. They have been mainly found via electronic database Medline and the Hellenic academic libraries Link (HEAL-Link). **Results:** Bulimia nervosa is mainly manifested in women in approximately 90% compared to men. It usually starts during adolescence or early adulthood. About 4% of adolescent women suffer from bulimia nervosa. Approximately 50% of people who had suffered from anorexia nervosa develop bulimia or bulimic behaviors. It is difficult to define the total number of individuals affected at older ages for bulimic people are usually secretive. Aside from this, this disorder is rare in children.

Conclusions: Early diagnosis and treatment of bulimia increases the rate of successful recuperation. In cases of severe weight loss, hospitalization with a special diet is needed so as to address the medical and nutritional needs of the patient.

Keywords:

Bulimia Nervosa, Causes, Types, Clinical Signs, Treatment.

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Introduction

To a significant degree, the bulimic disorder is considered to be unrecognized. The incidence of the disease is estimated to be 1-3% between adolescent and young women. Although not being classified in bulimia types, the tendency for periodic combination of overeating and using laxatives is quite common. Men with bulimia are just about 10-15% while this disorder seems to be more common in homosexual groups of male population. (Peroutsi & Gonidakis, 2011)

The number of people with bulimia nervosa (NB) seeking for help to control their weight is important. Bulimia nervosa related to commercial weight loss programs is touching 30-50%, while patients who have been operated to treat obesity reach an incidence that touches 25-70% in certain groups of the population. (Varsou, 2004)

Generally, the incidence of bulimia has shown a significant increase after the end of World War II. This can be interpreted as the primary result of the changes that have occurred regarding the socio-cultural expectations for women. Especially, the bulimia disorder is prevalent in the Western world and occurs more in developed countries. (Chakraborty & Basu, 2010)

The hypothesis that environmental factors play an important role in the inauguration and presentation of bulimia extracts the fact that immigrants from underdeveloped countries are at greater risk of developing the disorder despite their genetically relatives remaining in their country of origin. Most studies indicate that bulimia is more common in middle and upper socioeconomic strata of society. (Cooper & Fairburn, 2009)

Purpose

The purpose of this review is to present all items associated with bulimia nervosa and its treatment.

Reviewing Method and Material

Recent articles on the subject have been mainly found in Medline electronic database and the Hellenic academic libraries Link (HEAL-Link). They have been the material of the study, with the following keywords: bulimia nervosa, causes, types, clinical picture and treatment. The language of the articles was the Criterion for exclusion of articles except for Greek and English.

Defining Bulimia Nervosa

Bulimia nervosa is a type of eating disorders being specified according to diagnostic and statistical criteria of mental disorders (DSM-IV). The word bulimia (ravenous hunger) is derived from the word 'vous' (bos) and 'limos' (starvation) while it defines intense binge eating. Bulimia nervosa is characterized by frequent episodes of overeating due to the existence of oppressive feelings accompanied by corrective behaviour aimed at preventing weight gain. (Varsou, 2000) Excessive exercise, purging (self-induced vomiting) immediately after meals, overuse of diuretics and laxatives, and the use of medication that suppresses the appetite or increase the metabolic function of the body belong to behavioural types that bulimic people adopt. According to diagnostic criteria, bulimia is diagnosed when episodes of over-consumption of food occur, at least, twice a week for 3 months. (Zambelas, 2007)

Overeating is defined as the excessive food intake in a certain period of time, at least, in an hour while its quantity is quite larger than the food quantity that the majority of individuals would eat hourly. During this length of time, people completely lose control of food consumption. (Andersen & Ryan, 2010) The difference between a bulimic episode and an overconsumption one is that in the first category, the person consumes small amounts of food but he has no perception of the intake. However, in the second category the quantity of food consumed is greater without loss of food perception from the person. (Abraham & Lewelly, 1997)

Bulimia nervosa has been completely differentiated from excessive food intake; this is due to the fact that the overconsumption episodes are accompanied by specific behavior types, while this tendency is absent during excessive food intake process. (Usu, 1995)

Bulimia Nervosa Classification

There are two types of bulimia nervosa (Meule, Rezori & Blechert, 2014):

- ❖ **Purging type:** The individual succumbs in behaviors of medicine abuse such as laxatives, diuretics or he does enemas, and finally, he engages in self-induced vomiting during bulimia nervosa episodes. (Cooper & Fairburn, 2009)
- ❖ **Non-Purging type:** The individual adopts other compensatory behaviour such as fasting, excessive physical exercise during bulimia nervosa episodes but he does not use laxatives or engages in self-induced vomiting. (Vasou, 2000)

It is estimated that 66, 6% of bulimia nervosa patients belong in the first type of the disorder. The pathophysiology of that type presents greater severity than that of non-purging type. Obviously, there are most frequent episodes of food overconsumption, longer depression periods and other mental illnesses such as panic disorder. Bulimia nervosa sufferers try overcoming remorse deriving from the food overconsumption. As a consequence, they acquire purging behaviour. Nevertheless, the use of laxatives is an ineffective way of avoiding calorie intake. Self-induced vomiting leads to 50% loss of the quantity consumed, while diuretics or laxatives delay their action around 95%. (Kenyon, Samarawickrema, DeJong, Eynde, Startup, Lavender ... & Schmidt U, 2012)

Bulimia Nervosa Clinical Presentation

The most possible scenario of bulimia nervosa advent is the concern for the person's body weight and the search of help in order for him to lose weight. The symptoms may include abdominal inflation, constipation and menstrual disorders. Individuals suffering from bulimia nervosa rarely present heart arrhythmia as a result of electrolyte disorders. Bulimia is also characterized by inappropriate and continuous tendency of individual for thinner body and body dysmorphic disorder. (Vitousek & Manke, 1994)

A careful examination of bulimic people's diet often reveals their effort to monitor their body weight; they follow a diet and refrain from food of high caloric content until the inauguration of bulimic episodes. Those people often present pathological prejudice about food and diet. They may repeat circles of strict diet or fasting that can be alternated with gluttonous behaviour. Bulimic people usually preplan their episodes of food overconsumption. The food is selected with the criteria of easy ingestion, being removed via self-induced vomiting or being ruminated while it tends to be of high caloric value. (Cassin & Ranson, 2005)

Bulimic individuals avoid events in which the control of food intake can be lost such as parties or dinner in restaurants. The level of their physical activity alternates just like bulimic episodes, and while most bulimic individuals engage in self-induced vomiting right afterwards their meals, there is a minority of bulimic individuals that opt for chewing their food and afterwards they ruminate it without swallowing it. Vomiting is usually achieved with the intentional trigger of Pharyngeal (gag) reflex using the person's fingers or with the use of emetics. (Kaye, 2008)

The common gastrointestinal symptoms that bulimic individuals experience, include abdominal pains which are mainly obvious to the individuals that induce vomiting, abdominal swelling and constipation. Pneumonia can be triggered via the suction of vomiting in the lungs and shock is seldom observed. It is observed that 5% of bulimic women suffer from amenorrhea and a great number of female patients suffer from menstrual irregularity. (Vitousek & Manke, 1994, Kaye, 2008)



Etymology of Bulimia Nervosa

There are plenty of factors but the most important causative factors that accelerate the beginning of bulimic circles include anxiety, sentimental pressure, and lack of interests, hints about food by the family, alcohol consumption, substance abuse and physical exhaustion. The sense of hunger is a relatively uncommon factor that may trigger bulimic episodes. Several factors have been identified they play important role in pathogenesis of bulimia. (Rikani, Choudhry, Choudhry, Ikram, Asghar, Kajal ... & Mobassarrah, 2013) These are:

- **Psychological factors:** The individual's difficulties with his self-esteem and with the effective self-adjustment of his personality are enlisted in those factors. (Holland, Bodell & Keel, 2013)
- **Socio-political factors:** They consist of the excessive physical function and stress for the body idol. Also, intense prejudice for slimming is a common trait of both bulimia and anorexia nervosa.
- **Other disorders:** There seems to be a possible relation between other disorders and eating disorders. Acute depression is the most common disorder related with appearance of bulimia. Furthermore, Manic Depressive Disorder (Manic Depression) is more common to bulimic patients related to the rest of the population. Concern, anxiety and other relative Neuroses and phobias are related to bulimia. (Rikani, Choudhry, Choudhry, Ikram, Asghar, Kajal ... & Mobassarrah, 2013)
- **Gastrointestinal and Central Nervous System (CNS) Interactions:** It seems there is a complicated dysfunctional interaction between the appetizing factors such as Neuropeptide Y (NPY) and anorexic factors such as Cholecystokinin (CCK) and beta-Endorphin. Bulimics have normal NPY levels which increase after successful treatment. Moreover, bulimic individuals have decreased beta-Endorphin levels, normal Dynorphin levels and low levels of CCK. Studies have shown that the decreased function of C.N.S. Serotonin can play a role in bulimic development. (McCance & Huether, 2018)

Bulimia Nervosa Treatment

The strategies for Bulimia nervosa treatment include eating suggestions and diet reclamation, psychosocial interventions (behavior treatment, interpersonal, psychodynamic and psychoanalytic approaches) in individual, team or familial level, as well as medication. (Mehler, 2011)

- Nutritional rehabilitation

The major objectives for the treatment of bulimia nervosa are the reduction of both excessive eating and purgative behavior. The majority of bulimic patients have normal body weight. As a result, they do not aim at gaining weight. Nevertheless, in the case of patients with bulimia nervosa who diverge statistically from normal body weight, they must gain some weight in order to achieve body and sentimental stability. It is essential these patients establish regulated diet that pays attention to calorie intake and all food groups. (Mehler, Krantz & Sachs, 2015)

Even if most bulimic female patients report menstrual disorders, there seems to be no proof of improvement through nutritional re-establishment. Eating suggestions can be used amongst patients with normal weight so as the patients to reduce disturbed eating behaviors. As a result, they would improve their nutritional deficiency, increase food variety and they would be encouraged to adopt healthy eating standards. (Mehler, 2011)

- Psychological therapy

The objectives of psychosocial interventions vary and they can include some reduction or restriction the excessive eating and purgative behavior, improvement of attitude of life that relates to the eating disorder, increase of food intake, adoption of healthy exercise patterns, treatment of pathological

situations and clinical characteristics that are expressed in bulimia nervosa. (Wilson, Wilfley, Agras & Bryson, 2010)

- Individual psychotherapy

Cognitive behavior treatment is advisable for the patients that express the symptoms of the illness and the underlying situations that concern the disorder. This treatment is a type of psychosocial intervention whose beneficial results have been proved by loads of researchers. The patients who were treated with cognitive behavior treatment showed important reduction in excessive food intake, the frequency of self-induced vomiting and the use of laxatives. Nevertheless, a number of patients that achieved complete abstention from excessive food intake and purging behavior represents a minority of individuals. (Murphy, Straebl, Cooper & Fairburn, 2010)

Practically, there are a lot of other types of individual psychotherapy being used for the treatment of bulimia nervosa such as are the interpersonal and psychoanalytical approaches. The clinical experience also proposes that these approaches help in the treatment of pathological concern of personal problems and traumatic or abusive disorders of bulimia nervosa. (Vasou, 2000)

There is a type of treatment for cognitive behavior that uses techniques where the patients become spectators of bulimic behavior. In other words, they watch a person who consumes excessive food intake then, he induce vomiting in order to remove the consumed food. Nevertheless, the positive effect of this method has not been ascertained yet. (Holland, Bodell & Keel, 2013)

- Team psychotherapy

The approach of common psychotherapy is also used for the treatment of bulimia nervosa. The analysis that was exported from a study of 40 teams from bulimic patients proved a mediocre effectiveness of this method. However, the studies carried out one year afterwards reported the maintenance of these positive effects. Also, it has been found that the curriculum of common psychotherapy that combines eating education is more beneficial for the patients for the faster the intervention is, the better results are exported. A lot of clinical scientists prefer a combination of individual and common psychotherapy. (Wilson, Wilfley, Agras & Bryson 2010)

- Family therapy

Family therapy has been found to contribute in the treatment of bulimia nervosa in a number of cases. This treatment is applied mainly to adolescents who live with their parents, in adults with domestic/family frictions or to patients being separated couples. The interventions that will help bulimic mothers as well as their children are evaluated. (Le Grange, Lock, Loeb & Nicholls, 2010)

Conclusions

Bulimia nervosa is one from the most basic disorders of food intake and its etiology is multifaceted. Using the term « multifaceted », it is meant that it is possible the disorder to be caused due to biological, psychological or social - environmental factors, which to a large extent, contribute to the adoption of pathological models regarding food intake.

Bulimia nervosa is usually treated outside the hospital. Nevertheless, the patient may need hospital treatment if the disorder is severe or the patients shows serious complications. Early detection and treatment of bulimia increases the rate of successful rehabilitation. In cases of serious weight loss, the patient needs post-hospital follow-up visits with a special program of diet in order the medical and nutritious needs of the patient to be covered. (Grilo & Mitchell, 2011)

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